3001 SOUND ODYSSEY™

Instruction Manual

SIGHT & SOUND
Music Software, Inc.

3001 SOUND ODYSSEY™

by
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For Commodore 64 with Disk Drive

INTRODUCING 3001

3001 puts you in control of the powerful sound synthesizer built into your Commodore 64 computer. 3001's entertaining, on-screen tutorial teaches you important synthesizer concepts you can work with using Microsynth - the included synthesizer program. Microsynth makes full use of the SID (Sound Interface Device) chip, and simulates a versatile keyboard synthesizer. Sounds and songs created with Microsynth can be stored on disk.

Note: If you wish to save songs or sounds, you must format a work disk according to the instructions under **"Preparing Your Work Disk"**. If you're planning on saving data, formatting a work disk should be done before you load 3001.

LOADING

Load 3001 using the following steps:

1. If you have a joystick, plug it into control port 2 (rear port).

2. Insert the 3001 disk into the drive.

3. Type **LOAD"*",8,1**

4. Press the **RETURN** key.

5. For enhanced sound quality, you may want to connect your computer to a stereo system or other sound equipment. Consult the connection diagrams on page 29.

Loading takes approximately one and one-half minutes. Make sure the volume is up on your TV, monitor or sound system. Loading is complete when the introduction theme starts to play. It repeats until you press a key to enter the main menu. Press any key when you are finished watching the introduction.

GETTING AROUND

3001 is a menu driven program. The menu options can be selected using the keyboard or the joystick. If you don't have a joystick, you may use the cursor keys in place of the joystick directions, and the ←(left arrow) key in place of the fire button.
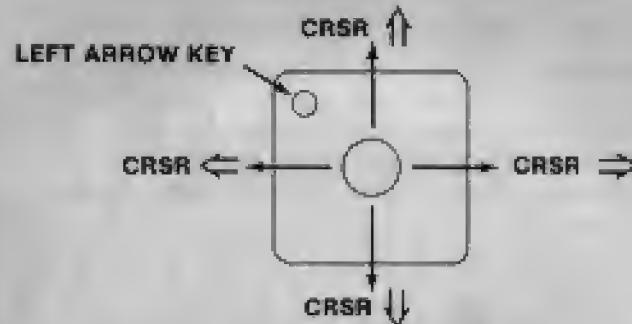
A DEMONSTRATION OF MICROSYNTH

In the main menu, use the joystick or cursor controls to move Mister E. Note to the section of the screen labelled "Demo - A Demonstration of Microsynth".

Press the **FIREBUTTON** or the ← (left arrow) key to load the demo. After loading, the demo starts by itself.

This demonstration is the actual Microsynth program being set up and played automatically by the computer. It's a small sample of the almost infinite number of sounds and effects you're able to produce with Microsynth. This demonstration repeats as many times as you wish.

Press the **RUN/STOP** and **M** keys together to return to the main menu.

THE TUTORIAL

In the main menu, move Mister E. Note to the section of the screen labelled "Tutorial - Everything You Need to Know About Synthesized Sound". Press the **FIREBUTTON** to enter the tutorial menu.

This menu is a list of lessons contained in the tutorial.

You may select any one of these at any time. However, it is recommended that you study them in the order listed below, at first. Then review them as you wish later.

1. Introduction
2. Volume
3. Pitch
4. ADSR
5. Waveforms
6. Filters
7. Ring Mod/Sync
8. LFO Modulation
9. Envelope Follower

Each lesson consists of:

1. Informational text (Show Me);
2. Automatic demonstrations (Show Me);
3. Demonstrations you control (Try Me).

You're given an opportunity to experiment and have some fun in each lesson. Spend some time in each one. They're designed to teach you concepts that you'll want to be familiar with when you start working with Microsynth.

Select a subject by moving Point Dexter on the screen and pressing the firebutton as before.

Once the lesson is loaded, use the space bar and fire button to select options or return to the tutorial menu.

At times, Micro Jaxxon, the dancer, performs for you during your lessons.

MICROSYNTH - THE SYNTHESIZER

To activate Microsynth, move Mister E Note in the main menu to the section of the screen labelled "Microsynth - The Synthesizer" and press the **FIREBUTTON.**

The screen you see is the Microsynth screen. All Microsynth functions can be accessed through this screen.

THE MUSICAL KEYBOARD

Microsynth transforms your Commodore 64 keyboard into a 24-note mini piano keyboard. The music keys are the top two rows of keys. See the diagram below for locations of keys.

B Note
(White Key)

Black
Keys ⟶ ☐ ☐ ■ ■ ☐ ■ ■ ■ ☐ ■ ■ ☐ ■ ■ ■ ■
White ⟶ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐
Keys

Play any of the indicated keys. Get familiar with the feel of the key action by playing simple melodies or gliding back and forth on the keys.

Note: Sight & Sound Music Software, Inc. has available the Incredible Musical Keyboard. This attaches to your Commodore 64 console and turns it into a real piano-like instrument with black and white keys. For more information, contact your dealer or Sight & Sound Music Software, Inc.
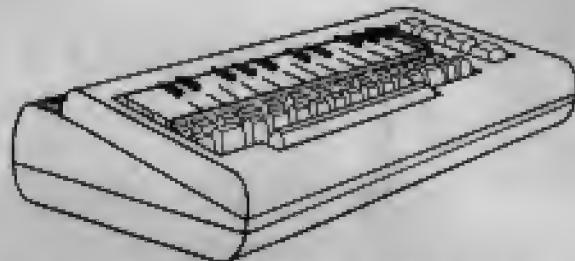
The Incredible Musical Keyboard

Note: As you become familiar with Microsynth, you'll be using various disk drive functions. During disk drive operations, be careful to not press the RESTORE key or the high B key on The Incredible Musical Keyboard.

SOME KEYBOARD FUNCTIONS

The following is a list of functions that can be used while playing the keyboard. Try each of them.

FUNCTION	KEY	DESCRIPTION
Color Organ On/Off	C	This function changes the border of the screen to a different color with every note played.
Note Name On/Off	N	This function displays the name of the note being played at the bottom left of the screen.
Octave Down	Commodore Key	These keys select the 2-octave range of notes the 64's keyboard plays. This is displayed by the light colored bar directly on top of the piano keyboard on the screen.
Octave Up	Left Shift Key	
Hold On/Off	Space Bar	With this function on, the current note sounds (at its sustain level) until another note is played.

PRESETS

In this section you'll get familiar with the use of some of the functions on the screen and work with a variety of interesting sounds and effects.

WHAT'S A PRESET?

Basically, a preset is a group of settings that make up the different sounds you can use when you play the music keys. You can easily create your own presets for an almost unlimited variety of sounds.

Groups of up to 100 presets can be saved on a disk. These groups of presets are called **preset files.** A preset file has been provided on the 3001 disk. The following instructions show you how to use this preset file, or preset files you create.

HOW TO LOAD AND USE PRESETS

THE CURSOR BAR

Microsynth functions are controlled or adjusted using the keyboard or joystick, and a red bar on the screen called the **cursor bar**. Use the joystick or cursor controls to move the colored bar up and down on the screen.

The red section of the colored bar is used to select the function you wish to work with. It can be moved within a line on the screen by moving left or right with the joystick or cursor keys.

LOADING PRESETS

Follow these instructions to load a preset file called "Presets":

1. Move the colored bar to the third line of functions from the bottom of the screen.

2. The first word on the left should be **PRESET**. If it isn't, move the red cursor bar to the word **SEQUENCER** and press the **FIREBUTTON**. It should now be **PRESET**.

3. Move the cursor bar over to the word **LOAD**.

4. Press the **RETURN** key.

5. The program asks you for a filename. Type **PRESETS** and press the **RETURN** key. Use the **DEL** key if you make a mistake.

6. 100 exciting sounds are now loaded into Microsynth.

Note: All preset files on a particular disk can be listed on the screen using the instructions under "Disk Directory" on page 27.

USING PRESETS

The number of the currently active preset (0-99) is displayed in the box in the upper left of the screen. Use the following procedures to get the other presets.

PRESET UP: Press the "**>**" key (shift key is not necessary), to advance to the next higher numbered preset and display it on the screen.

PRESET DOWN: Press the "**<**" key (shift key is not necessary) to move to the next lower numbered preset and display it on the screen.

Note: The above commands skip over preset numbers that do not represent valid preset data. For example, if you created your own preset file and no presets were created for numbers 10 through 20, the above commands would skip from preset 9 to preset 21, or vice versa.

Also, you may **CALL** any preset using the following steps.

1. Move the cursor bar to the word **CALL** on the preset line.

2. Press the **RETURN** key.

3. Enter the number of the preset you wish to select.

4. Press the **RETURN** key.

Your selected preset is ready.

Use the above procedures to step through all of the presets. Try the keyboard functions on page 8 for any of the presets. Notice how the settings on the screen change as you select different presets.

YOUR OWN PRESETS

You can create any number of your own presets. By changing the settings on the screen, you may shape a sound to your liking. You then use the **CREATE** function (see page 18) to make your sound an actual preset.

SOUND SETTINGS

Here is a line-by-line explanation of the settings on the screen. Move the cursor bar to the function described and follow the instructions. Once you're familiar with changing these settings, you're ready to create presets. Important note: If you wish to hear the difference in the sound as you change settings, use the HOLD function (pg. 8) to sustain a tone.

VOLUME

VOLUME affects the overall loudness of Microsynth.

Hold the FIREBUTTON down and move RIGHT to increase or LEFT to decrease the volume.

VOICES

Microsynth combines the three oscillators to form one complex sound. This line allows you to select which voices are on or off.

Use LEFT or RIGHT to move between the three voices. The FIREBUTTON toggles on and off the voice highlighted by the cursor. The ON voices are displayed with the VOICE number in reverse.

ENVELOPE

Consult the tutorial for an explanation of envelope.

The envelope sliders are displayed below each voice. Move LEFT or RIGHT to select one of the three voices. Press and hold the FIREBUTTON and move LEFT or RIGHT to select attack, decay, sustain, or release. Press and hold the FIREBUTTON and move UP to increase or DOWN to decrease. The slider being affected is black while all others are white.

The RETURN key 'links' the current slider with the same slider in the other two voices. Now holding the FIREBUTTON and moving UP or DOWN affects all three sliders. To 'unlink' move the cursor without the FIREBUTTON pressed.

WAVEFORM

The basic tonal quality or texture of a sound is determined by its waveform. For more information consult the tutorial.

Move LEFT or RIGHT to select one of the three voices. Press the FIREBUTTON to cycle through the four waveforms (triangle, sawtooth, pulse, and noise.)

PULSEWIDTH (PLS WDTH)

Pulse width only has an effect when the WAVEFORM for the selected voice is PULSE WAVE. Altering the pulse width varies the pulse wave sound from deeper reed-like instruments (like clarinets) through double reed sounds (like an oboe); to more piercing brass-like sounds. See the tutorial under WAVEFORMS.

Move RIGHT or LEFT to select a voice. Press and hold the FIREBUTTON and move UP or DOWN to increase or decrease the Pulse Width value.

Each time you push the joystick, the Pulse Width value increases by 1. If you push and hold the joystick in one direction, the steps in value become larger. The range of values is 0 to 4095. The next step UP from 4095 is 0 and the next DOWN from 0 is 4095.

RING MOD

Move LEFT or RIGHT to select a voice to be RING MODulated. The FIREBUTTON toggles the ring modulation on and off for the chosen voice. The TRIANGLE waveform must be set for this voice.

Ring Mod combines the wave form of two voices. With the Commodore 64 SID chip,

If you've chosen:	It's combined with:
Voice 1	Voice 3
Voice 2	Voice 1
Voice 3	Voice 2

These voices use the TRIANGLE waveform.　　These voices can use any waveform.

Note: Consult the 3001 Tutorial for more information on Ring Mod.

SYNC

Move LEFT or RIGHT to select a voice to be SYNCed. The FIREBUTTON toggles Sync on or off for that voice.

SYNC combines the waveforms of two voices. With the Commodore 64 SID chip:

If you've chosen:	It's combined with:
Voice 1	Voice 3
Voice 2	Voice 1
Voice 3	Voice 2

With SYNC, any waveform can be selected for either voice in the combination.

Note: Consult the 3001 Tutorial for more information on SYNC.

PITCH

Move LEFT and RIGHT to select a voice. Press and hold the FIREBUTTON and move UP or DOWN to increase or decrease the value. The range is from –24 to +24.

The PITCH number represents the number of half-tone steps above or below a note being pressed on the musical keys. If you play a 'C' on the musical keyboard and the pitch is 0, the actual note being played is 'C'. If the pitch is 1, the note being played is 'C#', 2 is 'D', etc. . .By arranging the pitches of all three voices, chords can be played!

The settings below produce a MAJOR chord: (See "CHORD ORGAN" for more details.)

VOICE	PITCH
1	0
2	4
3	7

FRQ OFFS

FReQuency OFFset is a de-tuner. It's used to de-tune
a voice or put it slightly out of pitch. Many effects
such as flanging and phasing can be produced by
setting two voices to the same pitch, and with this
feature, de-tune one of them. The slight difference in
pitch helps create a much thicker, richer sound.

FILTER

Voices with the FILTER on pass through the filter
selected on the next screen line. If no filters are
selected, the voice produces no sound.

Move LEFT and RIGHT to select a voice. The
FIREBUTTON toggles the filter on and off in the voice
selected.

HI LO BAND/RESONANCE

Moving LEFT and RIGHT selects between HI, LO,
BAND, or RESONANCE. When in HI, LO, or BAND,
the FIREBUTTON toggles these filters ON and OFF.
Filters that are ON are displayed in reverse. To set
RESONANCE, first move the cursor bar to the word
RESONANCE. Then press and hold the FIREBUTTON
and move LEFT or RIGHT to decrease or increase the
resonance value. Consult the tutorial for more
information on FILTERS.

CUTOFF 3 ON/OFF

Move LEFT or RIGHT to select either CUTOFF or 3
ON/OFF. In CUTOFF, press and hold the FIREBUTTON
and move LEFT or RIGHT to decrease or increase the
frequency at which the filters will react. In 3 ON/OFF,
the FIREBUTTON toggles this function ON or OFF.
See "Special Sound Functions". Consult the tutorial
for an explanation of filters and resonance.

SPECIAL SOUND FUNCTIONS

The last two lines of settings on the screen are for
special sound functions.

LFO MODULATION

The function on the line beginning with LFO creates
wavering effects in the sound. The pulse width (PUL),
frequency (FRQ), and filter cutoff (FLT) can be made
to waver up and down using this function. Select PUL,
FRQ, or FLT by moving the cursor bar left or right and
press the FIREBUTTON to turn the wavering effect on
or off. The speed of the wavering can be adjusted:
Move the cursor bar to SPEED. Then press and hold
the FIREBUTTON while moving the joystick up or
down to raise or lower the speed. Speed values can
vary between 0 and 255.

The intensity or depth of the wavering can also be
adjusted: Move the cursor bar to INT. Then, press and
hold the FIREBUTTON while moving the joystick up or
down to raise or lower the value. The INTENSITY
value can vary between 0 and 5.

Note: LFO modulation is generated using voice 3.
Therefore:

* Switch "3 ON/OFF" to the OFF position.

* The Waveform selected in Voice 3 affects the sound
of the wavering. Try the different waveforms and
notice the difference in the effect.

ENVELOPE FOLLOWER

The ENVELOPE FOLLOWER on the bottom line uses the ENVELOPE of voice 3 to modulate the sound. Instead of a fast wavering, it produces a gradual change in the sound. INT, PUL, FRQ and FLT are used the same way as in the LFO modulation.

Note: For more information on LFO modulation or the Envelope Follower, consult the tutorial.

PRESET/SEQUENCER LINE

Some of the following functions refer to the "Preset Line" or "Sequencer Line". This is the third line from the bottom of the screen. Move the cursor to the left of this line. Each press of the FIREBUTTON alternates between Preset and Sequencer.

CREATE PRESETS

The CREATE function in the Preset line on the screen allows you to assign a preset number to the settings on the screen. Here's how.

1. Move the cursor bar to CREATE in the PRESET line.

2. Press the RETURN key.

3. Enter a number 0 through 99 for your preset. Press the RETURN key.

4. If a preset having the selected number already exists, you'll be asked if you wish to replace it. Before moving on, decide if you want to keep the existing preset. If not, press 'Y' to replace it or 'N' to return to the main screen.

5. If you chose 'Y' in step 4, your settings are saved in the preset number you entered in step 3.

REMOVING PRESETS

Any preset 0 through 99 can be REMOVEd (erased) whether it's showing on the screen or not.

To remove a preset:

1. Move the cursor bar to REMOVE on the Preset line.

2. Press the RETURN key.

3. Enter the number of the preset you wish to remove.

4. Press the RETURN key.

If the preset you're removing is the one appearing on the screen, you have the option of moving it to another preset number by using the CREATE function. If you don't wish this option, skip to another preset. This completes the removal of the preset you chose in Step 3.

SAVING PRESETS ON DISK

All presets (0–99) can be saved in a preset file on disk using the SAVE command in the PRESET line. Here's how.

1. Insert formatted work disk into drive.

2. Move the cursor bar to SAVE in the PRESET line.

3. Press the RETURN key.

4. Enter a filename for your presets. Corrections can be made using the DEL key. Press the RETURN key.

Note: Filenames can be up to 11 characters long (no spaces between characters).

INSTANT PRESETS

You can program the Commodore 64 function keys to provide up to eight instantly callable presets. You can choose any of the presets already in Microsynth or use any of your own. The following steps show you how.

To program odd numbered function keys (F1, F3, F5, F7):

1. Press and hold the RUN/STOP and S keys at the same time.

2. While the RUN/STOP and S keys are being held, press the function key you wish to program.

3. A beep indicates programming is complete.

To program even numbered function keys (F2, F4, F6, F8):

1. Press and hold the RUN/STOP, S and RIGHT SHIFT keys at the same time.

2. While these 3 keys are pressed, press the function key you wish to program. Listen for the beep.

Any of the eight Instant Presets may be called by pressing the desired function key (shifted for even functions, unshifted for odd). See "Some Things To Try" for further uses of instant PRESETS.

THE SEQUENCER

The SEQUENCER is essentially a playback device somewhat like a tape recorder. In order to be in SEQUENCER, the PRESETS/SEQUENCER line must say SEQUENCER at the left. If it doesn't, simply move the red cursor bar to the beginning of the line and press the FIREBUTTON.

RECORDING

To record, select RECORD with the cursor bar. Press the RETURN key and the message RECORDING appears. Microsynth accurately records anything you play, including preset changes you make while playing. Recording starts when you play the first note.

When finished recording, press the RUN/STOP key. If you make a mistake you can restart by pressing the RETURN key. When RECORDING a song to be repeated (see Playback), make sure to stop the recording on the exact beat where you'd like it to start repeating.

PLAYBACK

Move the cursor bar to PLAY. While pressing and holding the = (equals) key, press RETURN to play the song currently in memory exactly as it was recorded, including all PRESET changes.

You can have a song automatically repeat by pressing the right SHIFT, =, and RETURN keys together. If you wish to play or repeat the song using only the PRESET currently on the screen, simply press the RETURN key or press the right SHIFT key with the RETURN key (for repeat). Microsynth then plays in the presently displayed PRESET with no further PRESET changes. RUN/STOP stops play or repeat.

RATE (R=)

RATE enables you to vary the playback speed of songs you've recorded. The range of values is -99 to 99. The Rate is useful for recording and playback of intricate songs. You can record at a low Rate Value, for example 0, and execute each note very slowly. For playback, increase the Rate Value to where the song plays at the correct speed. When you find the speed that sounds best, save the song to disk. Whenever you LOAD and PLAY that song again, it will play at the Rate Value you saved.

SAVING SEQUENCES

First select SEQUENCER. Move to the word SAVE. Press RETURN. The message SAVE FILENAME appears. Type in the name of the file you wish to save. The filename can be up to 11 characters long with no spaces between characters. This is displayed following the message. Corrections can be made using the DELETE (DEL) key. Press RETURN and the file is saved.

To exit this function any time before the final RETURN is pressed, press the RUN/STOP key.

LOADING SEQUENCES

First select SEQUENCER. Move to the word LOAD. Press RETURN. The message LOAD FILENAME appears. Type in the name of the file you wish to LOAD. This is displayed following the message. Corrections can be made using the DELETE key. Press RETURN and the file is LOADed.

To exit this function any time before the final RETURN is hit, press the RUN/STOP key.

Note: To display a list of sequences on the screen, use the instructions under "Disk Directory" on page 27.

SOME THINGS TO TRY
CHORD ORGAN

By using the PITCH line and INSTANT PRESETS described on pg. 20, it is possible to set up a simple chord organ.

1. Call up any preset or use the one on the screen.

2. Move to the PITCH line.

3. By changing any or all of the values on this line, different 3-note triads (chords) can be produced. See the chart below for a list of popular chords.

4. Once you have the chords you want, use the INSTANT PRESETS function to transfer each of them to one of the eight function keys.

5. Now you have up to eight different chord structures that can be called and played instantly.

These chords can be transposed to any key signature you want by simply playing the appropriate key on the musical keyboard. For example, if you set a function key to play a minor chord and press the note 'D' on the musical keyboard, you'll hear a 'D minor' chord; press the 'F♯' and you'll hear 'F♯minor', etc.

CHORD NAME		PITCH SETTINGS
	MAJOR	
MAJOR		0, 4, 7
SUSpended 4th		0, 5, 7
6th		0, 4, 9
7th		0, 4, 10
major 7th		0, 4, 11
	MINOR	
MINOR		0, 3, 7
6th		0, 3, 9
7th		0, 3, 10
DIMinished		0, 3, 6
AUGmented		0, 4, 8

PLAYER PIANO

The best way to explain this feature is by example. Move to the PRESET/SEQUENCER line and from PRESET, LOAD "BALLGAME." By using the PRESET UP or PRESET DOWN keys (> or <), move to preset #0. Now the fun begins!

Press and hold a note on the musical keyboard. Start repeatedly pressing the PRESET UP key (>). Try to keep your key presses at an even rate. Listen closely. You're playing "Take Me Out to the Ballgame". You can play it at any tempo you want or in any key signature. You can even play it backwards by using the PRESET DOWN key (<).

To understand how this effect is created, play through the song slowly, paying particular attention to the PITCH line on the screen. Notice how the pitch numbers change from preset to preset. This is what gives the effect of three individual parts being played. Basically, voice three is playing the melody, while the other two voices are playing the bass and chords. By arranging consecutive presets, each with changing pitch values, complex song structures can be created.

Note: During playback of PRESETS songs, a "click" sound is normal as the filter is turned off and on or the volume is changed.

RECORDING "TAKE ME OUT TO THE BALLGAME"

Use the following steps to record "Take Me Out to the Ballgame":

1. With the "Ballgame" preset file loaded, use the < and > keys or the CALL function to select preset 0.

2. Move the cursor bar to the PRESET/SEQUENCER line. In SEQUENCER move to RECORD. Press the RETURN key.

3. Repeatedly press the > key in an even manner as before until you've reached Preset 99.

4. When you reach preset 99 press the RUN/STOP key and recording is complete.

5. To listen to your recording select PLAY. While pressing and holding the = key, press the RETURN key.

6. If you're not satisfied with your recording you can re-record it using steps 1 - 4 above.

7. When you're satisfied with your recording, use the Save Sequence function on pg. 22 to save your song on disk.

There are other preset files on the program disk you can record the same way. They are "Canon", "Circus", and "Boogie".

SOME FUN FOR THE MUSICIAN

If you're an experienced musician or a bold beginner you can have some fun with the following activity. It uses a preset file and various music keys to create an exciting boogie pattern.

1. Load the PRESET file called "Boogie".

2. Select preset Ø by using the ◄ and ► keys or the CALL function.

3. While pressing and holding the Q key or low C on the Incredible Musical Keyboard, repeatedly press the ► key in an even manner until you reach preset number 31.

The above is a practice run through the first section of the song you'll record.

4. To play the entire "Boogie" hold the sequence of keys indicated in the chart below while repeatedly pressing the ►(next preset) key. Press the next key in the sequence when the preset # on the screen is the same as the number on the right below.

KEY		PRESS THE NEXT KEY WHEN THE PRESET # IS:
Q KEY	(C NOTE)	31
R KEY	(F NOTE)	15
Q KEY	(C NOTE)	31
T KEY	(G NOTE)	15
R KEY	(F NOTE)	31
Q KEY	(C NOTE)	Stop on 16

Repeat step 4 until you can play it without hesitation. You may then record it and save it as you did for "Take Me Out to the Ballgame". If you're a real pro you may want to experiment with the music keys and try different patterns.

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DISK DIRECTORY

To display the disk directory, first move to LOAD in either PRESET or SEQUENCER. Press RETURN. Type in DIR and press RETURN again. Microsynth loads the directory. The name of the disk and the number of blocks free on the disk are displayed at the bottom of the screen and the name of the first valid file appears on the right of the PRESETS/SEQUENCER line. If you have LOADed the directory from PRESETS, then only PRESET files are displayed. If you have LOADed the directory from SEQUENCER, then only SEQUENCER files are displayed. If there are no valid files on the disk, the message "NO FILES" is displayed.

Once the directory is LOADed, moving UP and DOWN with the joystick displays the names of all valid files. To LOAD any of these files, move until the file's name appears on the PRESET/SEQUENCER line and press RETURN. Microsynth loads the file into memory. If no file is desired, press RUN/STOP to exit this mode.

Since Microsynth can distinguish between files SAVEd by PRESETS and those SAVEd by SEQUENCER, both files may have the same name. For example, you may have a SEQUENCER file called "TUNE1" and a PRESET file to use with it also called "TUNE1".

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PREPARING YOUR WORK DISK

Since it is not possible to write to the Microsynth disk, it is necessary to prepare another disk for saving your PRESET and SEQUENCER files.

1. If 3001 is running, turn your computer **OFF** then **ON** again (no disk in drive).

2. Insert a blank disk in your disk drive. (Place in drive Ø if you are using a 4040 disk drive.)

3. Type **OPEN15,8,15**—Press **RETURN.**

4. Type **PRINT#15,"NØ:DISKNAME,ID":CLOSE15.** The 'Diskname' is any name up to 16 characters and ID is any two characters). Press **RETURN.**

TRANSFERING FILES

After you have formatted a work disk, you may want to transfer the PRESET and SEQUENCER files from the Microsynth disk to your new work disk. Doing this, you need only use your Microsynth disk to actually load the program and use your work disk from then on.

To do this, use the LOAD and SAVE functions on the PRESET/SEQUENCER line of the program. (See PRESETS and SEQUENCER for full information.)

1. LOAD the file you want to transfer from the Microsynth disk.

2. Remove the Microsynth disk.

3. Insert your work disk.

4. SAVE the file onto your work disk.

CONNECT 3001 TO SOUND EQUIPMENT

Using the audio out on your Commodore 64, you can play 3001 through many types of electronic sound equipment. These include:

* home stereo systems

* portable, personal stereo units

* effects units and a musical instrument amplifier

* or simply, a set of headphones.

HOME STEREO
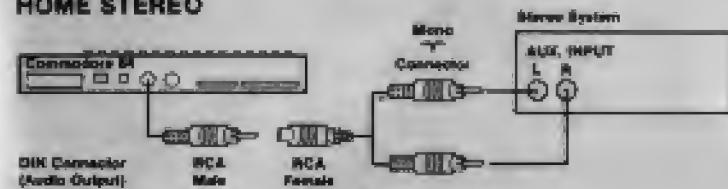
PERSONAL STEREO
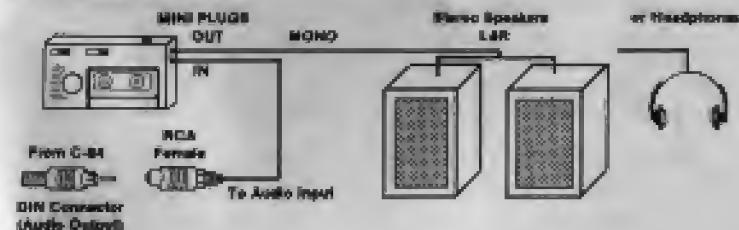
Note: Using this arrangement, you can play along with the radio or tape.

EFFECTS BOXES AND AMPLIFIER
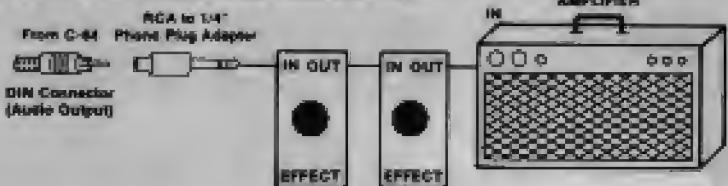
HEADPHONES
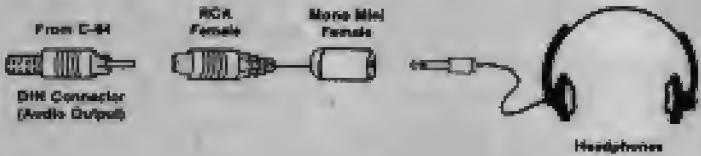
Important Note: Since the audio output level of the Commodore 64 is fairly high, use caution when connecting it to sensitive sound equipment. The following precautions should prevent any problems:

1. Turn volume controls all the way down before turning on any equipment. Then turn up the volume slowly once the equipment is turned on.

2. If distortion occurs at normal listening levels, turn off the system and consult your audio dealer before any further use.

USER SUPPORT INFORMATION

Sight & Sound Music Software, Inc. makes every attempt to ensure that you have purchased a product of excellent quality. Every product is subjected to rigorous testing. This Owner's Manual is as detailed and complete as possible to help you realize the full benefits of the software product you have purchased. Refer to this manual often.

CUSTOMER SERVICE

For additional support, Sight & Sound Music Software, Inc. Customer Service personnel are available to assist you from 8:00 AM to 5:00 PM (central time zone) Monday through Friday. Our telephone is 800-25SOUND (800-257-6863).

AFTER EXPIRATION OF LIMITED WARRANTY

DISKETTE' REPLACEMENT POLICY. If, after the expiration of the Limited Warranty but before the end of the second year after the date of purchase of the diskette by Purchaser, a defect in the diskette should occur, which is not the result of accident, abuse or misapplication of the diskette, Purchaser may return the defective diskette postage prepaid to Sight & Sound Music Software, Inc. accompanied by proof of date of purchase and a check or money order for $7.00 (American currency), and Sight & Sound Music Software, Inc. will replace the diskette. Sight & Sound Music Software, Inc. reserves the right, in its discretion, to replace the defective diskette with a diskette on which a new or revised version of the Program is recorded.

"If the Product being returned is a diskette, it must have the original Sight & Sound Music Software, Inc. manufactured label affixed. Sight & Sound Music Software, Inc. will not accept any diskette with a facsimile label attached.

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